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**FFCA MONTHLY PROGRESS REPORT FOR
PERIOD ENDING AUGUST 31, 1988**

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**12
ENCLOSURE**

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SUMMARY

Progressive actions associated with the Federal Facilities Compliance Agreement (FFCA) continued during the month of August, 1988. Highlights of work completed this month, and a separate listing of ongoing actions are shown below.

In April, FMPC completed installing the 76 on-site monitoring wells, and developed all of the 200 and 300 series wells during the month of May. Drilling continued this month on the 19 off-site wells. Seventeen (17) of these wells have been completed to date, 15 have been developed, and one is under construction.

For FY 1988, ten (10) stacks have been tested; three (3) in February, two (2) in April, and five (5) in August. Stack test reports for the three February tests have been prepared, and comments are currently being finalized.

A Technical Information Exchange (TIE) meeting was held in Dayton, Ohio on August 9, 1988.

Ohio EPA granted final approval of the Pit 4 Closure Plan.

The twelfth monthly RI/FS technical progress report was transmitted to the USEPA on August 20, 1988.

INTRODUCTION

As an integral part of the agreement between the U. S. Department of Energy (US DOE) and the USEPA signed on July 18, 1986, monthly reports are provided by US DOE to USEPA regarding the progress made to meet the provisions of that agreement. This report fulfills that requirement by describing actions undertaken at the Feed Materials Production Center (FMPC) during the period August 1 through August 31, 1988.

WORK ASSIGNMENTS AND PROGRESS

The status of ongoing and completed work in support of the FFCA is summarized in Table 1. Additional descriptions of the work being performed and progress on these tasks are presented in the following sections. In both this portion of the monthly report, and in Table 1 (attached) descriptions of actions are presented in a format consistent with that of the FFCA.

Comprehensive Environmental Response Compensation and Liability Act (CERCLA).

1. Interim Remedial Measures

Sections 1.A & 1.B

FMPC Standard Operating Procedures are being revised sitewide to address EPA comments received on the CERCLA section of the FFCA.

Section 1.C

FMPC is continuing the design of the K-65 silos internal stabilization using sand for radon attenuation rather than the internal foam application previously considered. This change in design was discussed with USEPA and Ohio EPA at the June 28 TIE Meeting. The Final Design will be completed upon receipt of the structural analysis data from the contractor. FMPC performed a technical evaluation of Camargo & Associates' (C&A) structural analysis proposal, and sent it back to C&A with comments. The schedule for stabilization will be revised after completion of the structural analysis. The K-65 Sampling Plan was discussed at the TIE meeting on August 9, 1988. The sampling plan has been reviewed, and comments are being incorporated. The stabilization and sampling schedules are being integrated. Sampling is scheduled for late October, 1988.

ASI/IT completed the radiological risk analysis for the proposed interim storage thorium warehouse. The study determined that FMPC will not exceed gamma level limits, established by DOE, if all the drummed thorium were stored in two warehouses. FMPC is proceeding with the conceptual design report for the two new thorium warehouses. The purchase requisition for the handling equipment is out for vendor review and bids.

On May 18, 1988, DOE received USEPA approval for finishing the system installation for removal of thorium from the Plant 8 silo and bins. Sampling of the material in the silo and bins was completed in June. Hardware fabrication associated with the extraction and drum filling equipment redesign was completed during August. IT Corporation brought their tool trailer and ventilation system on site, and have started erection of their containment systems. The Final Safety Analysis Report (FSAR) and the Operational Safety Requirements (OSR) document were approved by both the Independent Safety Review Committee (ISRC) and by DOE. The Operational Readiness Review will be performed in September. The schedule for the start of repackaging remains November 1, 1988.

2. Remedial Investigation/Feasibility Study (RI/FS)

Section 2.A to 2.D

Work on these sections is complete.

Section 2.E

The Work Plan Revision 3 and supporting documents were transmitted to USEPA on March 31, 1988. The Work Plan Revision 3 incorporates necessary revisions resultant from EPA's comments received to date on the RI/FS Work Plan. On May 16, FMPC received USEPA approval on Revision 3 of the RI/FS Work Plan. The Facilities Testing Plan has been prepared and is under FMPC review. The Plan will be transmitted to USEPA in September as an addendum to the RI/FS Work Plan.

The Feasibility Study Work Plan was reviewed and approved by DOE and was transmitted on schedule to USEPA on August 15, 1988.

Section 2.F

ASI continued the off-site drilling program, completing installation of 17 of the 19 new monitoring wells. Fifteen (15) of these wells have also been developed, and one additional well is under construction.

Approximately 95% of the samples taken during the first round of groundwater sampling have been analyzed. Of the 168 wells in the second round of sampling, 125 wells were sampled this month, completing this quarter's sampling.

ASI/IT is awaiting analysis from the radiological surface soils survey to determine the locations for the biased soil samples, which account for most of the remaining soil samples to be taken. All of the 35 quarterly sediment samples have been collected and sent to IT labs for analysis. All of the surface water samples from the Great Miami River have been collected. The Abandoned-in-Place (AIP) Equipment Survey continued during the month, with a total of 4486 smears analyzed from 90 pieces of equipment.

Section 2.G to 2.I

Work has not yet begun on these items.

3. Reports and Record Keeping

Section 3.B

The twelfth RI/FS monthly technical progress report was transmitted to USEPA on August 20, 1988.

Clean Air Act (CAA)

Section B - Items 1 through 4

The FMPC deliverable addressing Section B - Items 1 through 4 of the Clean Air Act Section of the FFCA was transmitted to USEPA in August 1986.

Section C

Under the FFCA, DOE will comply with the reporting provisions contained in 40 CFR 61.94 (c). Under these provisions, the DOE is required to, by June 1 annually, submit a report which includes the results of monitoring emissions from points subject to 40 CFR 61 Sub-part H and their associated dose calculations. The annual report for calendar year 1986 emissions was provided to EPA in 1987. The Annual Radionuclide Air Emission Report for calendar year 1987 was transmitted to USEPA on June 14, 1988.

Section D.1 & D.2

The proposed yearly particulate stack testing schedule for FY-88 was transmitted to EPA on December 31, 1987. A Revised Stack Test Schedule was submitted to USEPA on July 15, 1988. Three stack tests were conducted in February, two stacks were tested in April, and five stacks were tested in August. For the three February reports, comments have been received from the DOE Site Office and from DOE-ORO, and the reports are being finalized. All ten stack test reports will be sent to USEPA by December 1988.

Section E.2

The seventh Quarterly Particulate Emission Report covering the period from April 11, 1988 through July 5, 1988 is under FMPC review and will be forwarded to USEPA in September.

Sections F and G

Work on these sections is complete.

Resource Conservation and Recovery Act (RCRA)

Sections A and B - Items A.1 through A.7 and Items B.1 through B.5

USEPA-Region V provided comments on Sections A and B in December 1986. Both Sections were revised to reflect USEPA comments. The revised Section A was transmitted to the USEPA on January 23, 1987. The revised Section B was transmitted to the USEPA on January 28, 1987.

A May 12, 1987 letter from William D. Franz to James A. Reafsnnyder provided a second round of USEPA comments on these revised FFCA deliverables. DOE submitted a Waste Characterization Report to EPA on March 29, 1988, in response to RCRA Item A.1. The Waste Characterization Report answers the majority of EPA's RCRA concerns as spelled out in the Franz letter. FMPC's response to the remaining comments on RCRA A1-A7 is under review and will be delivered to USEPA and Ohio EPA in September.

A Final Closure Plan for the Pit 4 landfill was transmitted to USEPA on July 29, 1987. OEPA granted approval of the closure plan on February 9, 1988. On May 3, 1988, FMPC provided OEPA with construction specifications and drawings for closing Pit 4. OEPA sent approval of the closure plan, which was received June 29, 1988, with seventeen conditions. In addition, DOE sent an appeal to the seventeen conditions to OEPA on July 29, 1988. On August 19, 1988, a conference call was held with OEPA, and the remaining issues for the start of construction on the Pit 4 cover were resolved. USEPA provided comments on the cover design on August 30, 1988, and their remaining issues were also resolved. Construction of the cover is scheduled to begin in mid-September.

A Closure Plan for the Trane Liquid Incinerator was submitted to USEPA on January 29, 1988. FMPC received USEPA's disapproval and comments of this Plan on June 29. FMPC appealed several of the conditions in a July 29 letter to USEPA. On August 5, a revised closure plan was submitted to OEPA and USEPA. This plan reflected the changes that FMPC agreed to accept at OEPA's request.

A Closure Plan for the Barium Chloride facility was submitted to USEPA for approval in September, 1987. Approval was transmitted to FMPC in a February 3, 1988 letter, with conditions of submitting several sampling plans. FMPC submitted a sampling plan for the drummed waste (residue) to USEPA on March 3, 1988. A revised sampling plan for the rinsate was received on August 23, 1988, and is under FMPC review.

Section C.1

Work on this item is complete.

Radiation Discharge Information

Section A with Items A.1, A.2, and A.3

Six Quarterly Liquid Discharge Reports have been transmitted to the EPA thus far. The seventh quarterly report covering the period from April through July is under FMPC review and will be transmitted to USEPA in September.

TABLE 1.

**STATUS OF ASSIGNMENTS FOR WORK REQUIRED ON
FEDERAL FACILITIES COMPLIANCE AGREEMENT ACTIONS**

**STATUS OF ACTIONS AS OF
31-August-88**

ACTION	DESCRIPTION	COMPLETION TIME AFTER FFCA SIGNED	STATUS
ERCLA ACTIONS			
INTERIM REMEDIAL MEASURES			
1.A.	Develop and implement O&M procedures and work practices to control radioactive emissions, including radon gas and decay products.	60 days	Completed. Comments were received from U.S. EPA on June 2, 1987. A comment response was transmitted to U.S. EPA on July 10, 1987. SOPs in process of being revised.
1.B.	Develop and provide to EPA a plan and implementation schedule for the interim control of radon at the K-65 silos.	30 days	Revised deliverable was transmitted to EPA on January 23, 1987. Second set of comments on original August 17, 1986 submittal received June 17, 1987. A comment response was transmitted to U.S. EPA on July 10, 1987.
	Develop & provide to EPA a plan & implementation schedule for control of thorium compounds.		This schedule was provided to US EPA in the revised deliverable transmitted on January 23, 1987. Updates of thorium repackaging activities were presented to the US EPA during the June TIE meeting.
1.C.	Implement radon control plan approved by the EPA.	----	External Foaming of K-65 interim remedial action was completed Dec. 6, 1987. Internal material applications are being re-evaluated using sand for radon attenuation rather than foam. The schedule for stabilization is being integrated with the sampling schedule. Sampling is planned to begin in late October 1988.
	Implement interim control plan for thorium compounds as approved by the US EPA.		The Technical Summary of Plant 8 (silo & bins) thorium repackaging was transmitted to USEPA on 17-Feb-88. US EPA comments on the summary were issued on 25-Mar-88. The Thorium Technical Information Package (TIP) has been reviewed by US EPA, and approval obtained on May 18, 1988 for the subcontractor to begin construction of the removal equipment and containment facilities. A thorium silo sampling program was completed in June. The subcontractor began containment construction in mid-August. Repackaging is targeted for November 1, 1988.
2	REMEDIAL INVESTIGATION/INVESTIGATION STUDY		
2.A.	RI/FS work to be conducted in accordance with EPA guidelines.	NA	No Action Required.

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STATUS OF ACTIONS AS OF 31-August-88			
ACTION	DESCRIPTION	COMPLETION TIME AFTER FFCA SIGNED	STATUS
2.B.	-- No Action Required --	----	
2.C.	Provide to EPA analysis results for laboratory certification ---- SOW Task 7b.	45 days	Completed.
2.D.	Submit to EPA Work Plan for a complete sitewide RI/FS.	90 days	Work plan transmitted December 19, 1986. Supporting documents were transmitted on January 30, 1987.
2.E	Amend and submit revised RI/FS work plan to EPA if deficiencies are found.		Draft comments received from U.S. EPA on May 14, 1987. Final comments issued from U.S. EPA June 24, 1987. Comment responses and a revised Work Plan were transmitted to EPA on August 24, 1987. USEPA comments on the Work Plan Rev. 1 were received on December 28, 1987. The Work Plan Rev. 2 was transmitted to US EPA on February 11, 1988. Revision 3 of the Work Plan and supporting documentation was transmitted to USEPA on March 31, 1988. Revision 3 of the Work Plan was approved by US EPA on May 16, 1988.
2.F	Implement tasks detailed in the approved RI/FS Work Plan.		A conditional approval to initiate drilling 45 RI/FS monitoring wells was received from USEPA. Drilling of the wells was initiated on August 25, 1987. The FMPC received approval for installation of remainder of the monitoring wells on February 18, 1988. A total of 76 groundwater monitoring wells were completed by April 30, 1988, completing the drilling of all on-site wells. Installation of 19 off-site wells is continuing.
3	REPORTS AND RECORD KEEPING		
3.B	RI/FS Progress Report		The twelfth monthly RI/FS progress report was transmitted to US EPA on August 20, 1988.
CLEAN AIR ACT			
A.	-- No Action Required --	----	
B.1.	Install real-time alarm monitors on all MAJOR emission points. Also list non-alarmed emission	30 days	Completed.

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	points.		
B.2.	Establish and implement administrative controls for real-time monitors to ensure any unplanned releases will be detected and dealt with in 24 hours.	30 days	Completed.
B.3.	Establish and implement sample collection and analysis procedures and a QA plan to monitor ALL radionuclide emission points.	30 days	Completed.
B.4.	Establish schedule for the installation and replacement of emission control devices.	30 days	The schedule is included with the Annual Progress Report, sent to USEPA on April 4, 1988. A total of 57 dust collectors will be replaced.
	Prepare annual progress report on installation and replacement of emission control devices.	annually	The first Annual Progress Report on the Replacement of Air Pollution Control Devices-FFCA, Clean Air Act Section was submitted to USEPA on April 4, 1988.
	Respond to U.S. EPA comments on Air Monitoring Network WDF-JAR dated 12-May-87.		Completed. WDF concerns on monitoring station no. 6 addressed in July 14-17, 1987 meeting at the FMPC. Modifications to address WDF concerns on FMPC monitoring stations meeting EPA siting criteria were completed by April 30, 1988.
C.	Provide annual reports to EPA per 40 CFR 61.94(c)	yearly	The annual report for CY-1986 was transmitted to EPA in 1987. The Annual Radionuclide Air Emission Report for calendar year 1987 was forwarded to US EPA on June 14, 1988.
D.1	Provide EPA yearly stack-testing schedule.	yearly	Completed. The first annual stack testing schedule was transmitted to EPA in December, 1986. A revised schedule was transmitted July 24, 1987. The stack test schedule was transmitted to EPA on December 31, 1987. A revised 1988 schedule was transmitted on July 15, 1988.
D.2	Provide EPA stack-test results for stacks tested that year.	45 days after test analyses completed	Three stacks were tested in February, two in April, and five in August 1988. Three reports are being reviewed by DOE/SO and DOE/ORO, and comments are being finalized. All ten stack tests will be sent to US EPA by December 1988.

TABLE 1.
STATUS OF ASSIGNMENTS FOR WORK REQUIRED ON
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STATUS OF ACTIONS AS OF
31-August-88

ACTION	DESCRIPTION	COMPLETION TIME AFTER FFCA SIGNED	STATUS
E.1	Maintain records of monthly particulate matter emissions.	----	Continuing.
E.2	Provide quarterly reports to EPA on these emissions.	quarterly	The initial report was transmitted on December 12, 1986. The second report was issued April 20, 1987. The third report was issued July 29, 1987. The fourth report was issued October 19, 1987. The fifth quarterly report was transmitted to EPA during the month of March. The sixth Quarterly Particulate Emission Report covering the period of Jan. 4-Apr. 11, 1988 period was sent to US EPA on June 20, 1988. The seventh quarterly report for the April 11, 1988-July 5, 1988 period is under FMPC review, and will be sent to US EPA in September.
F.	Provide EPA list of environmental air monitoring equipment, including location and the O&M program.	60 days	Completed.
G.	Develop and provide EPA an O&M program for air pollution control devices.	90 days	Completed.
RCRA			
A.	Achieve compliance with interim status regulations.	30 days	Revisions to the A1-A7 submittals transmitted on January 23, 1987. Additional comments received on May 12, 1987. FMPC's final response to US EPA is anticipated by September, 1988. A Hazardous Waste Analysis Plan was transmitted to USEPA on March 29, 1988. A revised plan was transmitted to US EPA on July 20, 1988.
A.1.	Conduct hazardous waste determination on all waste streams.	30 days	Completed.
A.2.	Commence a hazardous waste analysis program.	30 days	Completed.
A.3.	Update of operating records pursuant to 40 CFR 265.73 and 265.309.	30 days	Completed.

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ACTION	DESCRIPTION	COMPLETION TIME AFTER FFCA SIGNED	STATUS
A.4.	Include full name and signature and date received on manifests pursuant to 40 CFR 265.71.	30 days	Completed.
A.5.	Update the facility closure plan to reflect the year the facility expects to begin closure.	30 days	Completed.
A.6.	Begin collection of all run-off from the active portions of pit 4.	30 days	Completed.
A.7.	Prepare and maintain outline for a groundwater quality assessment program.	30 days	Completed.
B.	Submit to EPA for approval a detailed groundwater monitoring plan.	90 days	Complete. Additional comments received from US EPA on May 12, 1987.
B.1.	Determine groundwater flow at the RCRA regulated units.	90 days	Completed.
B.2.	Provide map showing location of all RCRA monitoring wells.	90 days	Completed.
B.3.	Include design and construction specs for all RCRA wells.	90 days	Completed.
B.4.	Monitor for all Appendix VIII constituents, including radionuclides.	90 days	Completed.
B.5.	Include a sampling and analysis plan to meet 40 CFR 265.92.	90 days	Completed.
C.1.	Develop a closure plan for the landfill pursuant to 40 CFR 265.112.	60 days	Completed. Final closure plan for Pit 4 was transmitted to OEPA on July 29, 1987. OEPA granted approval of the closure plan on February 9, 1988. On May 3, 1988, FMPC provided OEPA construction specifications and drawings for capping over Pit 4. OEPA sent approval of the closure plan, with 17 conditions. It was received on June 29, 1988. DOE sent an appeal to these conditions to OEPA on July 29, 1988. OEPA gave final approval of the Pit 4 cover design in August 1988.

TABLE 1.

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ACTION	DESCRIPTION	COMPLETION TIME AFTER FFCA SIGNED	STATUS
C.2.	Develop a post-closure plan for the landfill pursuant to 40 CFR 265.118.	60 days	To be developed following RI/FS.
RADIATION DISCHARGE INFORMATION			
A.	Respond to USEPA comments on Items A.1. - A.3. WDF-JAR dated 12-May-87.		Completed.
A.1	Provide EPA with existing offsite environmental monitoring program.	30 days	Completed.
A.2	Provide EPA the QA program associated with the environmental monitoring program.	30 days	Completed.
A.3	Report to U.S. EPA, OEPA and Ohio Department of Health the results of the continuous liquid discharge samples.	quarterly	Initial report transmitted on December 12, 1986. Second report transmitted April 20, 1987. Third report transmitted July 29, 1987. Fourth report was transmitted in November, 1987. The fifth quarterly report was transmitted to USEPA on March 18, 1988. The sixth quarterly report was sent to EPA on June 20, 1988. The seventh quarterly report is under FMPC review, and will be transmitted to US EPA in September.
REPORTING REQUIREMENTS			
B	Issue monthly progress report of actions taken to ensure compliance with FFCA requirements.	30 days	Aug. 86 issued to US EPA Sep. 86. Sep. 86 issued to US EPA Oct. 86. Oct. 86 issued to US EPA Nov. 86. Nov. 86 issued to US EPA Dec. 86. Dec. 86 issued to US EPA Jan. 87. Jan. 87 issued to US EPA Feb. 87. Feb. 87 issued to US EPA Mar. 87. Mar. 87 issued to US EPA Apr. 87. Apr. 87 issued to US EPA May 87. May 87 issued to US EPA Jun. 87. Jun. 87 issued to US EPA Jul. 87. Jul. 87 issued to US EPA Aug. 87. Aug. 87 issued to US EPA Sep. 87. Sep. 87 issued to US EPA Oct. 87. Oct. 87 issued to US EPA Nov. 87. Nov. 87 issued to US EPA Dec. 87. Dec. 87 issued to US EPA Jan. 88.

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ACTION	DESCRIPTION	COMPLETION TIME AFTER FFCA SIGNED	STATUS
			Jan. 88 issued to US EPA Feb. 88.
			Feb. 88 issued to US EPA Mar. 88.
			Mar. 88 issued to US EPA Apr. 88.
			Apr. 88 issued to US EPA May. 88.
			May 88 issued to US EPA June 88.
			Jun. 88 issued to US EPA July 88.
			Jul. 88 issued to US EPA Aug. 88.